Adoption of AI-based chatbots for hospitality and tourism

Year: 2020 | Citations: 540 | Authors: Rajasshrie Pillai, Brijesh Sivathanu

Abstract

This study aims to investigate the customers' behavioral intention and actual usage (AUE) of artificial intelligence (AI)-powered chatbots for hospitality and tourism in India by extending the technology adoption model (TAM) with context-specific variables.,To understand the customers' behavioral intention and AUE of AI-powered chatbots for tourism, the mixed-method design was used whereby qualitative and quantitative techniques were combined. A total of 36 senior managers and executives from the travel agencies were interviewed and the analysis of interview data was done using NVivo 8.0 software. A total of 1,480 customers were surveyed and the partial least squares structural equation modeling technique was used for data analysis.,As per the results, the predictors of chatbot adoption intention (AIN) are perceived ease of use, perceived usefulness, perceived trust (PTR), perceived intelligence (PNT) and anthropomorphism (ANM). Technological anxiety (TXN) does not influence the chatbot AIN. Stickiness to traditional human travel agents negatively moderates the relation of AIN and AUE of chatbots in tourism and provides deeper insights into manager's commitment to providing travel planning services using AI-based chatbots.,This research presents unique practical insights to the practitioners, managers and executives in the tourism industry, system designers and developers of AI-based chatbot technologies to understand the antecedents of chatbot adoption by travelers. TXN is a vital concern for the customers; so, designers and developers should ensure that chatbots are easily accessible, have a user-friendly interface, be more human-like and communicate in various native languages with the customers.,This study contributes theoretically by extending the TAM to provide better explanatory power with human–robot interaction context-specific constructs – PTR, PNT, ANM and TXN – to examine the customers' chatbot AIN. This is the first step in the direction to empirically test and validate a theoretical model for chatbots' adoption and usage, which is a disruptive technology in the hospitality and tourism sector in an emerging economy such as India.